REMARKS/ARGUMENTS

Reconsideration and allowance in view of the foregoing amendment and the following remarks are respectfully requested.

The applicant and the undersigned wish to thank Examiner Poker for the courtesies extended during the interview of April 5, 2005. The amendment proposed during the interview is presented above and the arguments made are repeated herein for the record.

Claims 1-7, 9-15, and 17-44 are now pending.

Original claims 9-18 were rejected under 35 USC 112, second paragraph, as being indefinite. Claim 9 has been amended above to refer to the primary and secondary "spools" for consistency with the disclosure and to correct the obvious error noted by the Examiner. Reconsideration and withdrawal of the rejection are requested.

Original claims 1-3 were rejected under 35 USC 102(b) as being anticipated by Takatani et al. Applicant respectfully traverses this rejection. However, to advance prosecution, claim 1 has been amended to incorporate the limitations of original claim 8 and each of claims 5, 6 and 7 has been presented in independent form. New claims corresponding to original claims 2 and 3 have been added to depend from newly independent claims 5, 6 and 7, and also from newly independent claims 13, 14 and 15. Reconsideration and withdrawal of the rejection are requested.

Claims 4-8 were rejected under 35 USC 103(a) as being obvious from Takatani. Applicant respectfully traverses this rejection.

As noted by the Examiner, Takatani refers to the existence of plural peaks in the distribution of spherical fine particles. However, Takatani otherwise fails to anticipate or render obvious the invention. In this regard, Takatani discloses a resin compound for molding precision parts that includes *inter alia* 5 to 25% by weight of a whisker and 40 to 75% by weight by spherical fine particles. Takatani indicates that the inclusion of fine

particles having an average particle diameter of about 10μm is conventional, but in the resulting molded articles, there is the problem that the contact area between the filler and the resin is small so that the mechanical strength of the molded article is low. Takatani also notes that when the amount of the filler is increased to lower the coefficient of thermal expansion, there are problems with moldability and dimensional precision, for example. To overcome these problems, Takatani proposes a resin compound for molding precision parts wherein as a filler, not only the conventional spherical fine particles are provided, but also the whisker is contained therein. The result is that the contact area between the fillers and the resin component is increased and the mechanical strength is better than a resin compound containing solely conventional filler particles. Thus, Takatani teaches the skilled artisan to add a whisker. With regard to the particle sizes of spherical fine particles, Takatani discloses that these particles have an average particle diameter of at most 20μm, particularly at most 10μm in order to improve surface smoothness (column 6, lines 34-36).

Although Takatani describes the existences of two peaks in the distribution of fine spherical particles, there is no description characterizing the "valley" between these two peaks numerically; only the peaks are quantified by the above-noted maximum values and the ratio of the particle diameters of 4 to 10 or 2 to 6 described in column 6. While it may be inherent that there is a "lower" frequency of particles having a size between the small and large spherical particle peaks, it is not "inherent" that the frequency between the two particles would be "very low" as alleged by the Examiner and it is certainly not self evident what the ratio of the peak to valley might be.

In contrast to Takatani, the present application quantifies the valley between the small and large peaks and/or the two peaks to thereby provide a clear definition of the particle size distribution. By quantifying the description of the distribution, it is ensured that the resin composition embodying the invention is enabled to, e.g., easily penetrate into gaps between turns of the secondary coil wire in the ignition coil example embodiment of the invention. Furthermore, it is possible according to the invention to decrease the linear expansion coefficient of the resin composition by means of the filler

flowing between and amongst the turns of the coil wires. This results in a restriction in dielectric breakdown between turns of the coil wire and avoids irregular winding of the coil wire. The invention also enables the filler to be dispersed throughout the resin composition including between and among the coil wires. For this reason, there is only a small difference in linear expansion coefficient for the resin composition and the linear expansion coefficient for each member constituting the ignition coil device. Consequently there is little possibility of defects such as cracks resulting. Thus, the invention achieves both the merits of fluidity and decrease in the linear expansion coefficient with respect to the resin composition of the coil ignition device.

It is respectfully submitted that even accepting that Takatani discloses that there are large particle diameter and small particle diameter distributions among the fine particles of the filler, Takatani does not disclose why nor in anyway suggest the particular distribution characteristic specifically recited in applicant's independent claims. Furthermore, although Takatani characterizes his composition as well suited to molding precision parts and improving surface smoothness, Takatani does not teach or suggest that there would be any particular use or advantage to using his disclosed resin composition in an ignition coil where, e.g., smooth surface is not apparently of critical concern. Moreover, Takatani does not teach or suggest to the skilled artisan any problem of flowability between coil wires due to intermediate size particles, as disclosed and addressed by the invention, nor that the particle relations and distributions claimed address and overcome such problems. Therefore, Takatani does not motivate the skilled artisan to modify or adapt the resin composition he generally discloses nor use it or a modification of it in an ignition coil device. Furthermore, for the reasons advanced above, Takatani does not in any event teach the particular particle distribution claimed.

It is therefore respectfully urged that the invention claimed is in no way obvious from Takatani.

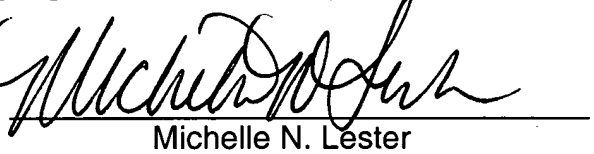
Claims 9-18 were rejected under 35 USC 103(a) as being unpatentable over Takatani in view of EP 1209705 (EP'705) (Hatachi et al). Applicant respectfully traverses this rejection.

For the reasons noted above, it is respectfully submitted that the prior art of record does not, without the benefit of applicant's disclosure, motivate the skilled artisan to use the Takatani resin compound within the ignition coil of Hatachi. Even if Takatani's resin compound was used in the Hatachi ignition coil, for the reasons advanced above, the invention specifically set forth in applicant's independent claims would still not be anticipated nor obvious, because Takatani does not disclose particulars of the particle distribution as set forth in applicant's independent claims and the prior art of record, in the absence of applicant's disclosure, does not motivate such an extrapolation of the Takatani teachings. New dependent claims 41-44 have been added to specify that the gaps of the secondary coil wire are filled with the resin composition, which is possible due to the claimed particle distribution.

All objections and rejections having been addressed, it is respectfully submitted that the present application is in condition for allowance and an early Notice to that effect is earnestly solicited.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: 

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